

## CLAIMS

WE CLAIM:

1. A method providing access to a data repository from an application, wherein data resident in the repository is organized via a schema defining at least one schema class having therein at least one attribute, the method comprising:

receiving from the application an access command, wherein the access command identifies a particular class and a particular property of the class, and wherein the access command further omits an identification of a particular schema class or a particular attribute of the schema;

translating the access command to a translated access command, wherein the translated access command identifies a particular schema class and a particular attribute of the schema, and wherein the translated access command further omits an identification of the particular class and the particular property of the class; and

transmitting the translated access command to the repository to obtain access to the repository.

2. The method according to claim 1, wherein the step of translating the access command to a translated access command comprises:

reading a mapping that identifies the particular property of the class and links the particular property of the class to the particular attribute of the schema; and

modifying the access command by removing a reference to the particular property of the class and by adding to the access command a reference to the particular attribute of the schema.

3. The method according to claim 2, wherein the step of translating the access command to a translated access command further comprises altering the format of the command such that the format of the translated access command is a format that the repository is capable of processing to grant access to the repository.

4. The method according to claim 3, wherein the step of translating the access command to a translated access command further comprises employing an application programming interface to process an intermediate command derived from the access command.

5. The method according to claim 2, wherein the particular class is defined by a class definition having therein a definition of the particular property, and at least one metadata tag associated with the definition of the particular property, and wherein reading the mapping that identifies the particular property of the class and links the particular property of the class to the particular attribute of the schema comprises reading the definition of the particular property and the associated metadata tag.

6. The method of claim 1, wherein the repository is an LDAP-compliant directory service, and wherein the schema is in accordance with the LDAP protocol.

7. The method of claim 1, wherein the repository is an LDAP-non-compliant repository, and wherein the schema is implicit.

8. The method according to claim 7, further comprising extracting the implicit schema and recording it as an express schema.

9. The method according to claim 1 further comprising:  
receiving a response from the repository pursuant to transmitting the translated access command to the repository, wherein the received response identifies the particular schema class and particular attribute of the schema, and omits an identification of the particular class and the particular property of the class;  
translating the received response to a translated response, wherein the translated response identifies the particular class and particular property of the class, and omits an identification of the particular schema class and the particular attribute of the schema;  
and  
fulfilling the access command received from the application by transmitting the translated response to the application.

10. A computer-readable medium having stored thereon computer-executable instructions for performing the method according to claim 1.

11. A computer-readable medium having stored thereon computer-executable instructions for performing the method according to claim 2.

12. A computer-readable medium having stored thereon computer-executable instructions for performing the method according to claim 5.

13. The method according to claim 1, wherein transmitting the translated access command to the repository to obtain access to the repository comprises transmitting the translated access command to an intermediary filter component that transmits a corresponding filtered translated access command to the repository.

14. The method according to claim 13, wherein the intermediary filter component comprises at least one application programming interface.

15. The method according to claim 1, wherein the access command is selected from the group consisting of a read command, a write command, and a search command.

16. A directory interface for facilitating simplified access by an application to a repository wherein data is organized in accordance with a schema having at least one attribute, the directory interface comprising:

an application interface for receiving from the application an access command that omits an identification of the at least one attribute and for transmitting to the application a translated repository response that also omits an identification of the at least one attribute; and

a repository interface for transmitting a translated access command to the repository, wherein the translated access command is derived from the access command

and includes an identification of the at least one attribute, and for receiving a repository response from which the translated repository response is derived, wherein the repository response also includes an identification of the at least one attribute.

17. The directory interface according to claim 16, wherein the repository interface comprises an application programming interface.

18. The directory interface according to claim 17, wherein the repository is LDAP-compliant and wherein the application programming interface of the repository interface comprises an LDAP API.

19. A computer-readable medium having thereon a computer-readable data structure defining a class definition, wherein the class definition comprises:

a definition of a class including a definition of at least one property of the class;  
and

metadata associated with the definition of at least one property of the class,  
wherein the metadata identifies an attribute of a directory schema.

20. The computer-readable medium according to claim 19, wherein the definition of the class comprises a plurality of definitions of a respective plurality of properties of the class, and wherein the metadata comprises metadata associated with each of the plurality of definitions.

21. The computer-readable medium according to claim 20, wherein metadata associated with a first of the plurality of definitions identifies an attribute of a first schema class within the directory schema and metadata associated with a second of the plurality of definitions identifies an attribute of a second schema class within the directory schema.

22. A mapping tool embodied on a computer-readable medium for associating a property of a class with an attribute of a schema class of a repository schema, the mapping tool comprising:

computer-executable instructions for presenting a first graphical user interface for user-selection of a selected class to be mapped to a selected schema class and for receiving a user selection of the selected class and the selected schema class;

computer-executable instructions for presenting a second graphical user interface for user-selection of a selected property of the selected class and a selected attribute of the selected schema class and for receiving a user selection of the selected property and the selected attribute; and

computer-executable instructions for annotating a definition of the selected class with metadata associating the selected property with the selected attribute in response to receiving a user selection of the selected property and the selected attribute.